

What is Claimed is:

1. A nasal mask assembly comprising:

a seal member defined from a unitary piece of elastomeric material, the seal member including:

a nose receiving cavity,

a first end portion,

a second end portion generally opposite the first end portion,

a first opening defined in the first end portion adapted to receive at least a portion of a nose of a patient such that nares of a patient communicate with the nose receiving cavity,

a neck portion defined in the second end portion, a

a second opening defined in the neck portion, the second opening communicates with the nose receiving cavity, and

side-walls extending between the second end portion and the first end portion, wherein the side-walls include an integrally formed reinforcement area of increased thickness, the reinforcement area including a contoured portion extending from said second end portion and having a pair of upper protrusion portions and a pair of lower protrusion portions, said protrusion portions adapted to supportingly contact a patient's face collar coupled to the neck portion, wherein the collar includes a plurality of headgear attachment points spaced apart from a central axis of the collar; and

a conduit coupling member coupled to the collar.

2. A nasal mask assembly according to claim 1, wherein the first end portion of the seal member includes an in-turned lip having a distal edge that is generally turned toward the nose receiving cavity.

3. A nasal mask assembly according to claim 1, wherein the collar includes a mounting member, and wherein the neck portion of the seal member removeably attaches to the mounting member.

4. A nasal mask assembly according to claim 1, wherein the collar is arranged and configured such that the plurality of headgear attachment points are maintained in a spaced apart relation from the seal member to minimize contact between headgear straps that are attachable to the collar at the plurality of headgear attachment points and the seal member responsive to the nasal mask assembly, including such headgear straps, being donned by a patient.

5. A nasal mask assembly according to claim 1, wherein the conduit coupling member is rotateably coupled to the collar.

6. A nasal mask assembly according to claim 1, wherein the conduit coupling member includes an elbow and an exhaust port defined therein.

7. A nasal mask assembly according to claim 6, wherein the exhaust port provides a direct path between an interior of the conduit coupling member and ambient atmosphere, and wherein the exhaust port has a diameter that constantly tapers in a direction from the interior of the conduit to an exterior thereof.

8. A nasal mask assembly according to claim 1, wherein the neck portion is substantially thicker than a remainder of the seal member to provide a relatively stable mounting base for attaching the second end portion of the seal member to the collar.

9. A nasal mask assembly according to claim 1, wherein the first end portion is contoured to correspond to a general facial structure of a population of patients.

10. A nasal mask assembly according to claim 1, wherein the seal member is sized such that an uppermost portion of the first end portion overlies a nose of a patient generally below a midpoint of such nose, and a lowermost portion of the first end portion overlies area of such a patient above an upper lip and below such a patient's nares, responsive to the nasal mask assembly being donned by such a patient.

11. A system for delivering a breathing gas to a patient, comprising:
a gas flow generating device that produces a flow of gas;
a conduit having a first end portion operatively coupled to the gas flow generating device and a second end portion, wherein the conduit carries the flow of gas from the gas flow generating device during operation of the system; and

a nasal mask assembly operatively coupled to the second end portion of the conduit, the nasal mask assembly comprising:

1) a seal member defined from a unitary piece of elastomeric material, the seal member including:

- a) a nose receiving cavity defined therein,
- b) a first end portion,
- c) a second end portion generally opposite the first end portion,
- d) a first opening defined in the first end portion adapted to receive at least a portion of a nose of a patient such that nares of a patient communicate with the nose receiving cavity,
- e) a neck portion defined in the second end portion,
- f) a second opening defined in the neck portion, wherein the second opening communicates with the nose receiving cavity, and
- g) side-walls extending between the second end portion and the first end portion, wherein the side-walls include an integrally formed reinforcement area of increased thickness, the reinforcement area including a contoured portion extending from said second end portion and having a pair of upper protrusion portions and a pair of lower protrusion portions, said protrusion portions adapted to supportingly contact a patient's face;

2) a collar coupled to the neck portion, wherein the collar includes a plurality of headgear attachment points spaced apart from a central axis of the collar; and

3) a conduit coupling member having a first end portion coupled to the collar and a second end portion coupled to the second end portion of the conduit.

12. A system according to claim 11, wherein the first end portion of the seal member includes an in-turned lip having a distal edge that is generally turned toward the nose receiving cavity.

13. A system according to claim 11, wherein the collar includes a mounting member, and wherein the neck portion of the seal member removeably attaches to the mounting member.

14. A system according to claim 11, wherein the collar is arranged and configured such that the plurality of headgear attachment points are maintained in a spaced apart relation from the seal member to minimize contact between headgear straps that are attachable to the plurality of headgear attachment points and the seal member responsive to the nasal mask assembly, including such headgear straps, being donned by a patient.

15. A system according to claim 11, wherein the conduit coupling member is rotateably coupled to the collar.

16. A system according to claim 11, wherein the conduit coupling member includes an elbow joint and an exhaust port defined therein.

17. A system according to claim 16, wherein the exhaust port provides a direct path between an interior of the conduit coupling member and ambient atmosphere, and wherein the exhaust port has a diameter that constantly tapers in a direction from the interior of the conduit to an exterior thereof.

18. A system according to claim 11, wherein the neck portion is substantially thicker than a remainder of the seal member to provide a relatively stable mounting base for attaching the second end portion of the seal member to the collar.

19. A system according to claim 11, wherein the first end portion of the seal member is contoured to correspond to a general facial structure of a population of patients.

20. A system according to claim 11, wherein the seal member is sized such that an uppermost portion of the first end portion overlies a nose of a patient generally below a midpoint of such nose, and a lowermost portion of the first end portion overlies area of such a patient above an upper lip and below such a patient's nares, responsive to the nasal mask assembly being donned by such a patient.

21. A nasal mask seal comprising:

a nose receiving cavity;

a first end portion;

a second end portion generally opposite the first end portion;

a first opening defined in the first end portion adapted to receive at least a portion of a nose of a patient such that nares of a patient communicate with the nose receiving cavity;

a neck portion defined in the second end portion;

a second opening defined in the neck portion, the second opening communicates with the nose receiving cavity;

side-walls extending between the second end portion and the first end portion, wherein the side-walls include an integrally formed reinforcement area of increased thickness, the reinforcement area including a contoured portion extending from said second end portion and having a pair of upper protrusion portions and a pair of lower protrusion portions, said protrusion portions adapted to supportingly contact a patient's face.